

USFS National BMP Review Form  
Leigh Creek Allotment – South Leigh Creek Unit

**Header**

1. Type of review being performed today: Implementation		2. If current review is for effectiveness only, what was the date of the implementation review for this site? N/A	
		3. Today's date: 9/15/2011	
4. Reviewer(s): Matt Hoggan, Heidi Heyrend, Lee Mabey, Brad Higginson, Jay Pence (part of day)		5. Title(s): District Range Management Specialist, S.O. Range Management Specialist, Fisheries Biologist, Hydrologist, District Ranger	
6. Region: 04	7. Forest: 15-Caribou-Targhee NF	8. District: Teton Basin RD	
9. Name of Allotment: Leigh C&H		10. Type of Grazing System: Deferred Rotation on 4 Pastures (includes Fred's Mountain last 2 years)	
11. Pasture or Unit: South Leigh (data); ocular look in North Leigh Unit & Fred's Mountain Allotment		12. Kind and Class of Livestock: Cattle & Horse	
13. Actual Stocking Rate: 132 cattle; 4 horses. 367 head months. 566 AUMs for cattle		14. Actual On Date: South Leigh: 7/14/2011 North Leigh: 7/28/2011 Fred's Mt.: 8/17/2011 Upper South Leigh: 9/7/2011	15. Actual Off Date: South Leigh: 7/27/2011 North Leigh: 8/16/2011 Fred's Mt.: 9/6/2011 Upper South Leigh: 10/1/2011
16. RMA ID: 00504		17. Water body evaluated: South Leigh & tributaries, Beaver Creek, Kiln Creek (Fred's Mountain Allotment), & North Leigh Creek (ocular, no data)	
18a. UTM Zone: 12N UTM Datum: NAD83	18b. Easting:	18c. Northing:	19a. Latitude: 19b. Longitude: 19c. Lat/Long Datum:
20. Pertinent Information From Previous Monitoring: Cattle came on the allotment on 7/14/2011 and were taken off on 10/1/2011. The cattle were turned on 18 days late to ensure for range readiness (wet spring). The cattle were allowed a 16 day extension to make up for entering the allotment late. The permitted time is 6/26 to 9/15.			

**Implementation Monitoring**

1. Are grazing permit terms and conditions used to protect or improve riparian and aquatic resources? <b>Bold one:</b> a. <b>Yes</b> (go to question 2) b. No (go to question 5)	
2. What are the grazing terms and conditions that protect or improve riparian and aquatic resources? The Revised Forest Plan (RFP) includes the following grazing standards for the Aquatic Influence Zone (AIZ): a. At the hydric green-line (HGL), there will be at least 4 inches of stubble height remaining on key species at the end of the grazing period, unless determined otherwise through the IDT process. This standard applies to key species of native and desirable non-native hydric vegetation. (S) b. Away from the HGL, at least 3 inches of stubble height will be left on the remainder of the key riparian species at the end of the grazing period, unless determined otherwise through the IDT process. (S) c. Not more than 30% use on riparian woody plant species (current year's growth) is allowed. 30% is the maximum allowed use as recorded at the end of the grazing period. (S).	
3. What is/are the sources of those terms and conditions? <b>Bold all that apply:</b> a. <b>AMP</b> b. NEPA decision c. <b>AOI</b> d. Biological Opinion e. <b>Forest LRMP</b> f. Other (specify)	
4. If range improvements were prescribed to improve or protect aquatic and riparian resources, were they implemented? <b>Bold one:</b> a. <b>Yes</b> b. No c. Not Applicable  <u>Comments:</u> The Leigh Creek/Fred Mountain boundary fence (#5136) provides for proper livestock distribution.	
6. Do the Annual Operating Instructions (AOI) include relevant triggers, requirements, or guidelines (e.g., LRMP, ESA Biological Opinion or Concurrence, etc.). <b>Bold one:</b> a. <b>Yes</b> b. No  <u>Comments:</u> The AIZ stubble height and woody utilization triggers listed above (#2) are included in the AMP and AOI.	

7. Annual Indicator Monitoring

**Indicator #1:** Residual stubble height on hydric green-line (HGL)

- a. Method: Paced Transect along HGL on unnamed tributary to South Leigh Creek.
- b. Numeric objective? 4 inches
- c. Actual measurement: 8 inch median at first location & 7 inch median at second location
- d. Indicator met? Yes
- e. If not met, why was indicator not achieved? N/A

**Indicator #2:** Residual stubble height away from the HGL, i.e. AIZ stubble height

- a. Method: Paced transect in AIZ
- b. Numeric objective? 3 inches
- c. Actual measurement: 6 inch median at two locations
- d. Indicator met? Yes
- e. If not met, why was indicator not achieved? N/A

**Indicator #3:** Riparian woody plant species utilization

- a. Method: Ocular Estimate
- b. Numeric objective? Less than 30%
- c. Actual measurement: No use: 0-5%
- d. Indicator met? Yes
- e. If not met, why was indicator not achieved? N/A

Comments pertaining to question 7: Several riparian areas were visited during the day. The group took the residual stubble height measurements at two locations that appeared to have the most cattle use (i.e. other areas visited appeared to have much lower use levels).

**Photos of the two areas where the AIZ and HGL residual stubble height was measured on 9/15/2011 (AIZ = 6 inches; HGL = 8 & 7 inches). Riparian woody (shrub) use was noted to be none (0-5%).**



8. Have desired condition objectives for the protection of aquatic and riparian resources applicable to the allotment been developed? **Bold one:**
- a. Yes (go to question 9)
  - b. **No** (end implementation questions)

Comments: The revised forest plan (RFP) does include two relevant guidelines that are used as a starting point for defining desired conditions and objectives. However, specific objectives and DFCs have not been developed for this allotment.

Relevant Guidelines from RFP:

1. Within subwatersheds occupied by native cutthroat trout or designated as vital to meeting recovery goals, identify areas where livestock grazing is causing fisheries habitat conditions to fall below or retard the rate of recovery toward the values described in the "Expected values for healthy fish habitat conditions" (listed below). Include specific remedial actions in the AMP or AOI. Progress toward meeting these expected values should be monitored and grazing systems adjusted, as necessary. (G)

Expected Values for Healthy Fish Habitat Conditions:

- o Pool frequency – at least 1 pool per length of stream equal to 5-7 times the channel width.
- o Water Temp. – 13° C or less with a max daily average no greater than 9 in spawning habitats or 16° C with a max daily average no greater than 12 in adult holding habitats.
- o LWD – Greater than 20 pieces/mile.
- o Bank stability – Greater than 80%
- o Lower bank angle (non-forested systems) – Greater than 75% of banks with less than 90° angle.
- o Width/depth ratio – suitable for Rosgen stream type.

2. Incorporate into AMPs, objectives for attainment of desired vegetation conditions for riparian plant community seral stage development and stream channel condition. (G)



9. What is/are the sources of the desired condition objectives? **Bold all that apply:**

- a. AMP
- b. NEPA decision
- c. AOI
- d. Biological Opinion
- e. **Forest LRMP**
- f. Other (specify):

## Effectiveness Monitoring

N/A: Although no measurements were collected on long-term indicators, the reviewers agreed that all the riparian areas visited are in properly functioning condition (PFC).

The team examined several potential sites in which to establish a riparian designated monitoring area (DMA), including South Leigh Creek, Beaver Creek, and two unnamed tributaries. None of the locations were good quality sites for establishing a DMA to aid in livestock management. On the smaller tributaries, abundant willows made the stream inaccessible to cattle (The site would detect little use). On the larger South Leigh Creek, the streambanks are well armored and protected by boulders, large rock, and woody debris; Cattle did not seem to be impacting these well armored streambanks.

DMA Recommendation: If the Fred's Mountain Allotment is incorporated into this allotment as another grazing unit, we recommend that a riparian DMA is installed on Kiln Creek to measure BMP effectiveness.

**Well armored streambanks and little livestock use along South Leigh Creek. Photo: 9/15/2011.**



**Beaver Creek above trail: well vegetated streambanks and little livestock use. Photo 9/15/2011.**



**Abundant willows along Beaver Creek, downstream of trail, result in little livestock use along streambanks. Photo: 9/15/2011.**



**Unnamed tributary to South Leigh Creek shows little livestock use along stream channel. Photo 9/15/2011.**



## Adaptive Management

1. Annual Indicators

- a. Were all annual indicators met? **Yes**
- b. If No, can actions be taken to correct or mitigate? **N/A**
  - o If No, why not? **N/A**
  - o If Yes, what changes in management should be taken? **N/A**

2. Long-term Indicators

- a. Were all long-term indicators met? **Not measured.** The field review did not identify any areas of concern. Overall, the reviewers agreed that all the riparian areas are in PFC. The annual indicator monitoring is adequate to maintain the areas at PFC. That is, if annual indicators continue to be met, the area should remain in PFC.

Several recreational impacts were identified along the South Leigh Creek Trail. There are several tributary and wetland/boggy area crossings that are over-widening due to recreational use. Trail/watershed improvement opportunities (e.g. trail relocation, crossing armoring) should be explored.

If no, is the site progressing toward the objective(s)? **N/A**

- b. What information was used to determine the trend? **N/A**
- c. If all long-term indicators were not met and the site is not progressing toward the objectives, is there a need to change either the annual indicator criteria (the criteria values and/or the indicator) or management? **N/A.**

**Over-widened trail crossings in a wet boggy area.**



3. Do rangeland improvements appear to be assisting in moving the allotment toward-long term objectives? **Yes. The Leigh Creek/Fred Mountain boundary fence (#5136) provides for proper livestock distribution.**

**GENERAL COMMENTS:** The Fred's Mountain Allotment has been used as an additional grazing unit to the Leigh Creek Allotment in recent years. In doing so, the numbers of cattle and total duration of use (time) have remained the same (i.e. no additional cattle or season). This has led to an overall reduction in grazing pressure on the allotment.